

TITLE: Giant magnetoresistive material film, method of producing the same and magnetic head using the same

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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17. Document ID: US 6368706 B1

L5: Entry 17 of 84

File: USPT

Apr 9, 2002

US-PAT-NO: 6368706

DOCUMENT-IDENTIFIER: US 6368706 B1

TITLE: Magnetoresistance effect element

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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18. Document ID: US 6362940 B1

L5: Entry 18 of 84

File: USPT

Mar 26, 2002

US-PAT-NO: 6362940

DOCUMENT-IDENTIFIER: US 6362940 B1

TITLE: Recording-reproducing magnetic head

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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19. Document ID: US 6356420 B1

L5: Entry 19 of 84

File: USPT

Mar 12, 2002

US-PAT-NO: 6356420

DOCUMENT-IDENTIFIER: US 6356420 B1

TITLE: Storage system having read head utilizing GMR and AMr effects

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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20. Document ID: US 6338899 B1

L5: Entry 20 of 84

File: USPT

Jan 15, 2002

US-PAT-NO: 6338899

DOCUMENT-IDENTIFIER: US 6338899 B1

TITLE: Magnetoresistance effect element, magnetic head, magnetic head assembly, magnetic storage system

US-PAT-NO: 6413325

DOCUMENT-IDENTIFIER: US 6413325 B1

TITLE: Method for manufacturing thin-film magnetic head

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KMC

## 13. Document ID: US 6406556 B1

L5: Entry 13 of 84

File: USPT

Jun 18, 2002

US-PAT-NO: 6406556

DOCUMENT-IDENTIFIER: US 6406556 B1

TITLE: Method for manufacturing thin-film magnetic head with magnetoresistive effect multi-layered structure

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KMC

## 14. Document ID: US 6400535 B1

L5: Entry 14 of 84

File: USPT

Jun 4, 2002

US-PAT-NO: 6400535

DOCUMENT-IDENTIFIER: US 6400535 B1

TITLE: Magnetoresistive effect multi-layered structure and thin-film magnetic head with the magnetoresistive effect multi-layered structure

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KMC

## 15. Document ID: US 6395388 B1

L5: Entry 15 of 84

File: USPT

May 28, 2002

US-PAT-NO: 6395388

DOCUMENT-IDENTIFIER: US 6395388 B1

TITLE: Magnetoresistance effect element

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KMC

## 16. Document ID: US 6387550 B1

L5: Entry 16 of 84

File: USPT

May 14, 2002

US-PAT-NO: 6387550

DOCUMENT-IDENTIFIER: US 6387550 B1

L5: Entry 8 of 84

File: USPT

Oct 29, 2002

US-PAT-NO: 6473275

DOCUMENT-IDENTIFIER: US 6473275 B1

TITLE: Dual hybrid magnetic tunnel junction/giant magnetoresistive sensor

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KM/C
Draw Desc	Image									

## 9. Document ID: US 6455177 B1

L5: Entry 9 of 84

File: USPT

Sep 24, 2002

US-PAT-NO: 6455177

DOCUMENT-IDENTIFIER: US 6455177 B1

TITLE: Stabilization of GMR devices

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KM/C
Draw Desc	Image									

## 10. Document ID: US 6452385 B1

L5: Entry 10 of 84

File: USPT

Sep 17, 2002

US-PAT-NO: 6452385

DOCUMENT-IDENTIFIER: US 6452385 B1

TITLE: Magnetoresistive effect sensor with double-layered film protection layer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KM/C
Draw Desc	Image									

## 11. Document ID: US 6430013 B1

L5: Entry 11 of 84

File: USPT

Aug 6, 2002

US-PAT-NO: 6430013

DOCUMENT-IDENTIFIER: US 6430013 B1

TITLE: Magnetoresistive structure having improved thermal stability via magnetic barrier layer within a free layer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KM/C
Draw Desc	Image									

## 12. Document ID: US 6413325 B1

L5: Entry 12 of 84

File: USPT

Jul 2, 2002

PUBLICATION-DATE: November 29, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shimazawa, Koji	Nagano		JP	
Ohta, Manabu	Nagano		JP	
Sasaki, Tetsuro	Nagano		JP	

US-CL-CURRENT: 148/108

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## └ 6. Document ID: US 20010020884 A1

L5: Entry 6 of 84

File: PGPB

Sep 13, 2001

PGPUB-DOCUMENT-NUMBER: 20010020884  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20010020884 A1

TITLE: Magnetic transducer and thin film magnetic head

PUBLICATION-DATE: September 13, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Araki, Satoru	Tokyo		JP	
Tsuchiya, Yoshihiro	Tokyo		JP	
Sano, Masashi	Tokyo		JP	
Uesugi, Takumi	Tokyo		JP	

US-CL-CURRENT: 336/200

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## └ 7. Document ID: US 6478884 B2

L5: Entry 7 of 84

File: USPT

Nov 12, 2002

US-PAT-NO: 6478884  
DOCUMENT-IDENTIFIER: US 6478884 B2

TITLE: Method for manufacturing thin-film magnetic head with spin valve magnetoresistive sensor

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## └ 8. Document ID: US 6473275 B1

## 3. Document ID: US 20020065349 A1

L5: Entry 3 of 84

File: PGPB

May 30, 2002

PGPUB-DOCUMENT-NUMBER: 20020065349  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020065349 A1

TITLE: Magneto-resistive CrO2 polymer composite blend

PUBLICATION-DATE: May 30, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Manoharan, Solomon Sundar	Kanpur		IN	

US-CL-CURRENT: 524/431; 264/104, 264/105, 264/331.17, 524/495

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

## 4. Document ID: US 20010046110 A1

L5: Entry 4 of 84

File: PGPB

Nov 29, 2001

PGPUB-DOCUMENT-NUMBER: 20010046110  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20010046110 A1

TITLE: MAGNETORESISTIVE DEVICE HAVING A HIGHLY SMOOTH METAL REFLECTIVE LAYER

PUBLICATION-DATE: November 29, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
KAWAWAKE, YASUHIRO	UJI-SHI		JP	
SAKAKIMA, HIROSH	KYOTANABE-SHI		JP	
SATOMI, MITSUO	KATANO-SHI		JP	

US-CL-CURRENT: 360/324.12; 360/324.11

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

## 5. Document ID: US 20010045245 A1

L5: Entry 5 of 84

File: PGPB

Nov 29, 2001

PGPUB-DOCUMENT-NUMBER: 20010045245  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20010045245 A1

TITLE: Method for manufacturing thin-film magnetic head with spin valve magnetoresistive sensor

**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 20 of 84 returned.****1. Document ID: US 20020126426 A1**

L5: Entry 1 of 84

File: PGPB

Sep 12, 2002

PGPUB-DOCUMENT-NUMBER: 20020126426  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020126426 A1

TITLE: Spin valve sensor with a spin filter and specular reflector layer

PUBLICATION-DATE: September 12, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gill, Hardayal Singh	Palo Alto	CA	US	

US-CL-CURRENT: 360/324.12; 29/603.07, 360/314, 360/324.11

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KIMC

**2. Document ID: US 20020122278 A1**

L5: Entry 2 of 84

File: PGPB

Sep 5, 2002

PGPUB-DOCUMENT-NUMBER: 20020122278  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020122278 A1

TITLE: MAGNETORESISTIVE EFFECT MULTI-LAYERED STRUCTURE AND THIN-FILM MAGNETIC HEAD WITH THE MAGNETORESISTIVE EFFECT MULTI-LAYERED STRUCTURE

PUBLICATION-DATE: September 5, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
SHIMAZAWA, KOJI	TOKYO		JP	
SASAKI, TETSURO	TOKYO		JP	
OHTA, MANABU	TOKYO		JP	

US-CL-CURRENT: 360/324.11

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KIMC

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

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Term	Documents
"5422571".EPAB,JPAB,USPT,PGPB.	84
5422571S	0
"5422571".USPT,PGPB,JPAB,EPAB.	84
(5422571).USPT,PGPB,JPAB,EPAB.	84

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**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 21 through 40 of 84 returned.**☒ 21. Document ID: US 6331773 B1

L5: Entry 21 of 84

File: USPT

Dec 18, 2001

US-PAT-NO: 6331773

DOCUMENT-IDENTIFIER: US 6331773 B1

TITLE: Pinned synthetic anti-ferromagnet with oxidation protection layer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 22. Document ID: US 6302970 B1

L5: Entry 22 of 84

File: USPT

Oct 16, 2001

US-PAT-NO: 6302970

DOCUMENT-IDENTIFIER: US 6302970 B1

TITLE: Method for manufacturing thin-film magnetic head with spin valve magnetoresistive sensor

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 23. Document ID: US 6294911 B1

L5: Entry 23 of 84

File: USPT

Sep 25, 2001

US-PAT-NO: 6294911

DOCUMENT-IDENTIFIER: US 6294911 B1

TITLE: Measurement method of magnetization direction of magnetoresistive effect devices and measurement apparatus based on the method of TDK corporation

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

☐ 24. Document ID: US 6287709 B1

L5: Entry 24 of 84

File: USPT

Sep 11, 2001

US-PAT-NO: 6287709

DOCUMENT-IDENTIFIER: US 6287709 B1



TITLE: Spin-valve film, magnetoresistance-effect device and magnetoresistance-effect magnetic head

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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└ 25. Document ID: US 6270588 B1

L5: Entry 25 of 84

File: USPT

Aug 7, 2001

US-PAT-NO: 6270588

DOCUMENT-IDENTIFIER: US 6270588 B1

TITLE: Magnetoresistive effect sensor, thin-film magnetic head with the sensor and manufacturing method of the thin-film magnetic head

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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└ 26. Document ID: US 6256222 B1

L5: Entry 26 of 84

File: USPT

Jul 3, 2001

US-PAT-NO: 6256222

DOCUMENT-IDENTIFIER: US 6256222 B1

TITLE: Magnetoresistance effect device, and magnetoresistance effect type head, memory device, and amplifying device using the same

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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└ 27. Document ID: US 6255814 B1

L5: Entry 27 of 84

File: USPT

Jul 3, 2001

US-PAT-NO: 6255814

DOCUMENT-IDENTIFIER: US 6255814 B1

TITLE: Method and apparatus for measuring bias magnetic field for controlling magnetic domain of magnetoresistive effect element

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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└ 28. Document ID: US 6222702 B1

L5: Entry 28 of 84

File: USPT

Apr 24, 2001

US-PAT-NO: 6222702

DOCUMENT-IDENTIFIER: US 6222702 B1

TITLE: Magnetic read element shield having dimensions that minimize domain wall movement

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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└ 29. Document ID: US 6194896 B1

L5: Entry 29 of 84

File: USPT

Feb 27, 2001

US-PAT-NO: 6194896

DOCUMENT-IDENTIFIER: US 6194896 B1

TITLE: Method of controlling magnetic characteristics of magnetoresistive effect element and of magnetic head with the element, magnetic head device with magnetoresistive effect element, and magnetic disk unit with the device

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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└ 30. Document ID: US 6191577 B1

L5: Entry 30 of 84

File: USPT

Feb 20, 2001

US-PAT-NO: 6191577

DOCUMENT-IDENTIFIER: US 6191577 B1

TITLE: Magnetic sensor exhibiting large change in resistance at low external magnetic field

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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└ 31. Document ID: US 6166539 A

L5: Entry 31 of 84

File: USPT

Dec 26, 2000

US-PAT-NO: 6166539

DOCUMENT-IDENTIFIER: US 6166539 A

TITLE: Magnetoresistance sensor having minimal hysteresis problems

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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└ 32. Document ID: US 6163437 A

L5: Entry 32 of 84

File: USPT

Dec 19, 2000

US-PAT-NO: 6163437

DOCUMENT-IDENTIFIER: US 6163437 A

TITLE: Magnetic head with spin valve effect magnetoresistive element and its manufacturing method

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWMC
Draw Desc	Image									

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33. Document ID: US 6159593 A

L5: Entry 33 of 84

File: USPT

Dec 12, 2000

US-PAT-NO: 6159593

DOCUMENT-IDENTIFIER: US 6159593 A

TITLE: Magnetoresistance effect element

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWMC
Draw Desc	Image									

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34. Document ID: US 6157525 A

L5: Entry 34 of 84

File: USPT

Dec 5, 2000

US-PAT-NO: 6157525

DOCUMENT-IDENTIFIER: US 6157525 A

TITLE: Magnetic head

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWMC
Draw Desc	Image									

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35. Document ID: US 6157125 A

L5: Entry 35 of 84

File: USPT

Dec 5, 2000

US-PAT-NO: 6157125

DOCUMENT-IDENTIFIER: US 6157125 A

TITLE: Conductive anti-reflection film

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWMC
Draw Desc	Image									

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36. Document ID: US 6154348 A

L5: Entry 36 of 84

File: USPT

Nov 28, 2000

US-PAT-NO: 6154348

DOCUMENT-IDENTIFIER: US 6154348 A

TITLE: Magnetoresistive head and method of initialization having a non-planar anti-ferromagnetic layer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## ✓ 37. Document ID: US 6134090 A

L5: Entry 37 of 84

File: USPT

Oct 17, 2000

US-PAT-NO: 6134090

DOCUMENT-IDENTIFIER: US 6134090 A

TITLE: Enhanced spin-valve/GMR magnetic sensor with an insulating boundary layer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## ┘ 38. Document ID: US 6123781 A

L5: Entry 38 of 84

File: USPT

Sep 26, 2000

US-PAT-NO: 6123781

DOCUMENT-IDENTIFIER: US 6123781 A

TITLE: Method of controlling magnetic characteristics of spin-valve magnetoresistive element and of magnetic head with the element

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## ┘ 39. Document ID: US 6115216 A

L5: Entry 39 of 84

File: USPT

Sep 5, 2000

US-PAT-NO: 6115216

DOCUMENT-IDENTIFIER: US 6115216 A

TITLE: Magnetoresistance effect type head and separate recording-reproducing type magnetic head

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## ┘ 40. Document ID: US 6111782 A

L5: Entry 40 of 84

File: USPT

Aug 29, 2000

US-PAT-NO: 6111782

DOCUMENT-IDENTIFIER: US 6111782 A

TITLE: Magnetoresistance effect device, and magnetoresistance effect type head, memory device, and amplifying device using the same

**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 41 through 60 of 84 returned.**☐ 41. Document ID: US 6105237 A

L5: Entry 41 of 84

File: USPT

Aug 22, 2000

US-PAT-NO: 6105237

DOCUMENT-IDENTIFIER: US 6105237 A

TITLE: Method of making spin value read head with low moment, high coercivity pinning layer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

[KMIC](#)☐ 42. Document ID: US 6101071 A

L5: Entry 42 of 84

File: USPT

Aug 8, 2000

US-PAT-NO: 6101071

DOCUMENT-IDENTIFIER: US 6101071 A

TITLE: MR film with upper and lower magnetic layers with resistivity greater than that of MR film magnetic layers

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

[KMIC](#)☐ 43. Document ID: US 6093444 A

L5: Entry 43 of 84

File: USPT

Jul 25, 2000

US-PAT-NO: 6093444

DOCUMENT-IDENTIFIER: US 6093444 A

TITLE: Magnetoresistive transducer with spin-valve structure and manufacturing method of the same

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

[KMIC](#)☐ 44. Document ID: US 6081114 A

L5: Entry 44 of 84

File: USPT

Jun 27, 2000

US-PAT-NO: 6081114

DOCUMENT-IDENTIFIER: US 6081114 A

TITLE: Method and apparatus for testing magnetic head with magnetoresistive element

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWIC

## ┌ 45. Document ID: US 6056996 A

L5: Entry 45 of 84

File: USPT

May 2, 2000

US-PAT-NO: 6056996

DOCUMENT-IDENTIFIER: US 6056996 A

TITLE: Magnetoresistance effect type head and separate recording-reproducing type magnetic head

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWIC

## ┌ 46. Document ID: US 6005798 A

L5: Entry 46 of 84

File: USPT

Dec 21, 1999

US-PAT-NO: 6005798

DOCUMENT-IDENTIFIER: US 6005798 A

TITLE: Magnetoresistance effect device, and magnetoresistance effect type head, memory device, and amplifying device using the same

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWIC

## ✓ 47. Document ID: US 5998993 A

L5: Entry 47 of 84

File: USPT

Dec 7, 1999

US-PAT-NO: 5998993

DOCUMENT-IDENTIFIER: US 5998993 A

TITLE: Method and apparatus for testing magnetic head with spin-valve magnetoresistive element

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWIC

## ┌ 48. Document ID: US 5998016 A

L5: Entry 48 of 84

File: USPT

Dec 7, 1999

US-PAT-NO: 5998016

DOCUMENT-IDENTIFIER: US 5998016 A

TITLE: Spin valve effect magnetoresistive sensor and magnetic head with the sensor

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

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49. Document ID: US 5991125 A

L5: Entry 49 of 84

File: USPT

Nov 23, 1999

US-PAT-NO: 5991125

DOCUMENT-IDENTIFIER: US 5991125 A

TITLE: Magnetic head

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

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50. Document ID: US 5956215 A

L5: Entry 50 of 84

File: USPT

Sep 21, 1999

US-PAT-NO: 5956215

DOCUMENT-IDENTIFIER: US 5956215 A

TITLE: High density thin film coupled element read head with support element to prevent damage to magnetoresistive element

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

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51. Document ID: US 5945904 A

L5: Entry 51 of 84

File: USPT

Aug 31, 1999

US-PAT-NO: 5945904

DOCUMENT-IDENTIFIER: US 5945904 A

TITLE: Giant magnetoresistors with high sensitivity and reduced hysteresis and thin layers

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

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52. Document ID: US 5930062 A

L5: Entry 52 of 84

File: USPT

Jul 27, 1999

US-PAT-NO: 5930062

DOCUMENT-IDENTIFIER: US 5930062 A

TITLE: Actively stabilized magnetoresistive head

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## └ 53. Document ID: US 5920446 A

L5: Entry 53 of 84

File: USPT

Jul 6, 1999

US-PAT-NO: 5920446

DOCUMENT-IDENTIFIER: US 5920446 A

TITLE: Ultra high density GMR sensor

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## └ 54. Document ID: US 5909115 A

L5: Entry 54 of 84

File: USPT

Jun 1, 1999

US-PAT-NO: 5909115

DOCUMENT-IDENTIFIER: US 5909115 A

TITLE: Position detecting apparatus employing magnetoresistance effect elements connected in series

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## ✓ 55. Document ID: US 5896252 A

L5: Entry 55 of 84

File: USPT

Apr 20, 1999

US-PAT-NO: 5896252

DOCUMENT-IDENTIFIER: US 5896252 A

TITLE: Multilayer spin valve magneto-resistive effect magnetic head with free magnetic layer including two sublayers and magnetic disk drive including same

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## └ 56. Document ID: US 5880913 A

L5: Entry 56 of 84

File: USPT

Mar 9, 1999

US-PAT-NO: 5880913

DOCUMENT-IDENTIFIER: US 5880913 A

TITLE: Antiparallel pinned spin valve sensor with read signal symmetry



Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KVMC

## └ 57. Document ID: US 5872690 A

L5: Entry 57 of 84

File: USPT

Feb 16, 1999

US-PAT-NO: 5872690

DOCUMENT-IDENTIFIER: US 5872690 A

TITLE: Magnetic transducer and magnetic recording device utilizing material in which  
undirectional anisotropy can be formed

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## └ 58. Document ID: US 5867351 A

L5: Entry 58 of 84

File: USPT

Feb 2, 1999

US-PAT-NO: 5867351

DOCUMENT-IDENTIFIER: US 5867351 A

TITLE: Spin valve read head with low moment, high coercivity pinning layer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## └ 59. Document ID: US 5856008 A

L5: Entry 59 of 84

File: USPT

Jan 5, 1999

US-PAT-NO: 5856008

DOCUMENT-IDENTIFIER: US 5856008 A

TITLE: Article comprising magnetoresistive material

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## └ 60. Document ID: US 5852531 A

L5: Entry 60 of 84

File: USPT

Dec 22, 1998

US-PAT-NO: 5852531

DOCUMENT-IDENTIFIER: US 5852531 A

TITLE: Spinvalve magnetoresistive head and method of manufacturing the same and  
magnetic recording/reproducing apparatus

**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 61 through 80 of 84 returned.****61. Document ID: US 5835314 A**

L5: Entry 61 of 84

File: USPT

Nov 10, 1998

US-PAT-NO: 5835314

DOCUMENT-IDENTIFIER: US 5835314 A

TITLE: Tunnel junction device for storage and switching of signals

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

[KVMC](#)**62. Document ID: US 5815343 A**

L5: Entry 62 of 84

File: USPT

Sep 29, 1998

US-PAT-NO: 5815343

DOCUMENT-IDENTIFIER: US 5815343 A

TITLE: Magnetic recording medium, process for producing the same and magnetic recording system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

[KVMC](#)**63. Document ID: US 5768071 A**

L5: Entry 63 of 84

File: USPT

Jun 16, 1998

US-PAT-NO: 5768071

DOCUMENT-IDENTIFIER: US 5768071 A

TITLE: Spin valve sensor with improved magnetic stability of the pinned layer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

[KVMC](#)**64. Document ID: US 5766743 A**

L5: Entry 64 of 84

File: USPT

Jun 16, 1998

US-PAT-NO: 5766743

DOCUMENT-IDENTIFIER: US 5766743 A

TITLE: Magnetoresistance effect film, a method of manufacturing the same, and magnetoresistance effect device

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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└ 65. Document ID: US 5764056 A

L5: Entry 65 of 84

File: USPT

Jun 9, 1998

US-PAT-NO: 5764056

DOCUMENT-IDENTIFIER: US 5764056 A

TITLE: Nickel-manganese as a pinning layer in spin valve/GMR magnetic sensors

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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└ 66. Document ID: US 5748413 A

L5: Entry 66 of 84

File: USPT

May 5, 1998

US-PAT-NO: 5748413

DOCUMENT-IDENTIFIER: US 5748413 A

TITLE: Magnetoresistive reas transducer with exchange biasing of magnetoresistive sensor and soft adjacent layer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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└ 67. Document ID: US 5747997 A

L5: Entry 67 of 84

File: USPT

May 5, 1998

US-PAT-NO: 5747997

DOCUMENT-IDENTIFIER: US 5747997 A

TITLE: Spin-valve magnetoresistance sensor having minimal hysteresis problems

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

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└ 68. Document ID: US 5742458 A

L5: Entry 68 of 84

File: USPT

Apr 21, 1998

US-PAT-NO: 5742458

DOCUMENT-IDENTIFIER: US 5742458 A

TITLE: Giant magnetoresistive material film which includes a free layer, a pinned layer and a coercive force increasing layer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

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## └ 69. Document ID: US 5725963 A

L5: Entry 69 of 84

File: USPT

Mar 10, 1998

US-PAT-NO: 5725963

DOCUMENT-IDENTIFIER: US 5725963 A

TITLE: Magnetoresistance effect element

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## └ 70. Document ID: US 5717550 A

L5: Entry 70 of 84

File: USPT

Feb 10, 1998

US-PAT-NO: 5717550

DOCUMENT-IDENTIFIER: US 5717550 A

TITLE: Antiferromagnetic exchange biasing using buffer layer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## ✓ 71. Document ID: US 5701223 A

L5: Entry 71 of 84

File: USPT

Dec 23, 1997

US-PAT-NO: 5701223

DOCUMENT-IDENTIFIER: US 5701223 A

TITLE: Spin valve magnetoresistive sensor with antiparallel pinned layer and improved exchange bias layer, and magnetic recording system using the sensor

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## └ 72. Document ID: US 5695864 A

L5: Entry 72 of 84

File: USPT

Dec 9, 1997

US-PAT-NO: 5695864

DOCUMENT-IDENTIFIER: US 5695864 A

TITLE: Electronic device using magnetic components

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

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## └ 73. Document ID: US 5691936 A

L5: Entry 73 of 84

File: USPT

Nov 25, 1997

US-PAT-NO: 5691936

DOCUMENT-IDENTIFIER: US 5691936 A

TITLE: Magnetoresistive element and memory element

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KVMC

## └ 74. Document ID: US 5688380 A

L5: Entry 74 of 84

File: USPT

Nov 18, 1997

US-PAT-NO: 5688380

DOCUMENT-IDENTIFIER: US 5688380 A

TITLE: Method of producing giant magnetoresistive material film and magnetic head

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## └ 75. Document ID: US 5686837 A

L5: Entry 75 of 84

File: USPT

Nov 11, 1997

US-PAT-NO: 5686837

DOCUMENT-IDENTIFIER: US 5686837 A

TITLE: Magnetic field sensor and instrument comprising such a sensor

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

## └ 76. Document ID: US 5677625 A

L5: Entry 76 of 84

File: USPT

Oct 14, 1997

US-PAT-NO: 5677625

DOCUMENT-IDENTIFIER: US 5677625 A

TITLE: Giant magnetoresistance, production process and application to a magnetic sensor

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KVMC

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**77. Document ID: US 5635835 A**

L5: Entry 77 of 84

File: USPT

Jun 3, 1997

US-PAT-NO: 5635835

DOCUMENT-IDENTIFIER: US 5635835 A

TITLE: Self biased multilayer magnetoresistance sensor

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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**78. Document ID: US 5633771 A**

L5: Entry 78 of 84

File: USPT

May 27, 1997

US-PAT-NO: 5633771

DOCUMENT-IDENTIFIER: US 5633771 A

TITLE: Magnetoresistance effect type head and separate recording-reproducing type magnetic head

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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**79. Document ID: US 5633770 A**

L5: Entry 79 of 84

File: USPT

May 27, 1997

US-PAT-NO: 5633770

DOCUMENT-IDENTIFIER: US 5633770 A

TITLE: Digital output magnetoresistive (DOMR) head and methods associated therewith

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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**80. Document ID: US 5629922 A**

L5: Entry 80 of 84

File: USPT

May 13, 1997

US-PAT-NO: 5629922

DOCUMENT-IDENTIFIER: US 5629922 A

TITLE: Electron tunneling device using ferromagnetic thin films

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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L5: Entry 81 of 84

File: USPT

Apr 15, 1997

US-PAT-NO: 5621592

DOCUMENT-IDENTIFIER: US 5621592 A

TITLE: Magnetic head with magnetically stable shield layers and/or write poles

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
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**82. Document ID: US 5563331 A**

L5: Entry 82 of 84

File: USPT

Oct 8, 1996

US-PAT-NO: 5563331

DOCUMENT-IDENTIFIER: US 5563331 A

TITLE: Magnetoresistive sensor utilizing a sensor material with a perovskite-like crystal structure

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
Draw Desc	Image									

**83. Document ID: US 5546253 A**

L5: Entry 83 of 84

File: USPT

Aug 13, 1996

US-PAT-NO: 5546253

DOCUMENT-IDENTIFIER: US 5546253 A

TITLE: Digital output magnetoresistive (DOMR) head and methods associated therewith

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
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**84. Document ID: US 5422571 A**

L5: Entry 84 of 84

File: USPT

Jun 6, 1995

US-PAT-NO: 5422571

DOCUMENT-IDENTIFIER: US 5422571 A

TITLE: Magnetoresistive spin valve sensor having a nonmagnetic back layer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KVMC

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Term	Documents
"5422571".EPAB,JPAB,USPT,PGPB.	84
5422571S	0
"5422571".USPT,PGPB,JPAB,EPAB.	84
(5422571).USPT,PGPB,JPAB,EPAB.	84

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TITLE: Dual, synthetic spin valve sensor using current pinning

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KVMC
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☐ 5. Document ID: US 6388847 B1

L4: Entry 5 of 6

File: USPT

May 14, 2002

US-PAT-NO: 6388847

DOCUMENT-IDENTIFIER: US 6388847 B1

TITLE: Specular spin valve with robust pinned layer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
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☐ 6. Document ID: US 6181534 B1

L4: Entry 6 of 6

File: USPT

Jan 30, 2001

US-PAT-NO: 6181534

DOCUMENT-IDENTIFIER: US 6181534 B1

TITLE: Antiparallel (AP) pinned spin valve sensor with specular reflection of conduction electrons

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC
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Term	Documents
"6181534".EPAB,JPAB,USPT,PGPB.	6
6181534S	0
"6181534".USPT,PGPB,JPAB,EPAB.	6
(6181534).USPT,PGPB,JPAB,EPAB.	6

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L4: Entry 1 of 6

File: USPT

Oct 22, 2002

US-PAT-NO: 6469877

DOCUMENT-IDENTIFIER: US 6469877 B1

TITLE: Spin valve device with improved exchange layer defined track width and method of fabrication

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC
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☐ 2. Document ID: US 6460243 B1

L4: Entry 2 of 6

File: USPT

Oct 8, 2002

US-PAT-NO: 6460243

DOCUMENT-IDENTIFIER: US 6460243 B1

TITLE: Method of making low stress and low resistance rhodium (RH) leads

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC
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☐ 3. Document ID: US 6424507 B1

L4: Entry 3 of 6

File: USPT

Jul 23, 2002

US-PAT-NO: 6424507

DOCUMENT-IDENTIFIER: US 6424507 B1

TITLE: Spin valve magnetoresistive sensor for high temperature environment using iridium manganese

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC
Draw Desc	Image										

☐ 4. Document ID: US 6418000 B1

L4: Entry 4 of 6

File: USPT

Jul 9, 2002

US-PAT-NO: 6418000

DOCUMENT-IDENTIFIER: US 6418000 B1